

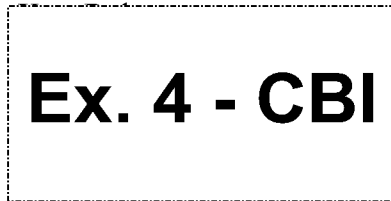
Lockheed Martin IS&GS – Civil  
Energy & Environment  
ESAT Region 3  
US EPA Environmental Science Center  
701 Mapes Road Ft. Meade, MD 20755-5350  
Telephone 410-305-3037 Facsimile 410-305-3597



**Date:** February 06, 2012

**Subject:** Inorganic Data Validation (IM2 Level)  
Project: 180-2644-1  
Site: Dimock

**From:**



**To:** Colleen Walling  
ESAT Region 3 Project Officer

## **OVERVIEW**

Third Party Project 180-2644-1 consisted of two (2) aqueous samples analyzed for mercury (Hg) by cold vapor technique and for total metals by ICP-MS. In addition, these samples were filtered by the laboratory and analyzed for dissolved Hg and dissolved metals. Samples were analyzed by TestAmerica Pittsburgh (TALPA) according to SW-846 Methods 7470A (Hg) and 6020 (metals).

## **SUMMARY**

Data were validated according to Region 3 Modifications to the National Functional Guidelines for Inorganic Data Review, Level IM2, and is assigned the Superfund Data Validation Label S4VM (Stage\_4\_Validation\_Manual). Areas of concern with respect to data usability are listed below.

Data in this case have been impacted by outliers present in laboratory blanks. Details of these outliers are discussed under "Minor Problem," specific samples affected are outlined in "Table 1A" and qualified analytical results for all samples are summarized on Data Summary Forms (DSFs).

**MINOR PROBLEM**

The Method (MB) and Continuing Calibration (CCBs) Blanks had reported results greater than the Method Detection Limits (MDLs) for the analytes listed below. Positive results for these analytes in affected samples which are less than five times (<5X) blank concentrations may be biased high and have been qualified “B” on the DSF.

| <u>Blank</u> | <u>Affected Analytes</u>                                 |
|--------------|--|
| CCB          | lead (Pb), molybdenum (Mo), antimony (Sb), thallium (Tl) |
| MB (Total)   | zinc (Zn)  |

**NOTES**

Reported results between MDLs and Reporting Limits (RLs) were qualified “J” unless superseded by “B” on the DSF.

The laboratory reported results within control limits for matrix spike/matrix spike duplicate and ICP serial dilution analyses. However, these analyses were not performed on a sample in this sample set. No action was taken by the reviewer based on this finding.

The requirement for ICP-MS and cold vapor MDLs to be performed within one (1) year of sample analysis was not met by the laboratory. No action was taken by the reviewer based on these findings.

**ATTACHMENTS****INFORMATION REGARDING REPORT CONTENT**

Table 1A is a summary of qualifiers applied to the laboratory-generated results during data validation.

|            |   |
|------------|---|
| Table 1A   | Summary of qualifiers on data summary forms after data validation |
| Table 1B   | Codes used in comments column of Table 1A                         |
| Appendix A | Glossary of Data Qualifier Codes                                  |
| Appendix B | Data Summary Form(s)  |
| Appendix C | Chain of Custody Records  |
| Appendix D | Laboratory Case Narrative   |

DCN: 180-2644-1\_Metals